

ABSTRACT OF THE DISCLOSURE

An exhaust gas purifying device of the present invention comprises NOx trap catalyst including NOx trap material, catalytic metal and O2 storage material, NOx sensor, section for releasing NOx when NOx absorbed amount of the NOx trap catalyst reaches a specified amount, section for determining diagnosis conditions of the NOx trap catalyst, section for detecting termination of O2 release from the O2 storage material, and section for diagnosing O2 storage capacity according to output value (NO1) of the NOx sensor during a term from beginning of the oxygen concentration lowering by the NOx release section until termination of the O2 release and for diagnosing NOx reduction capacity of the catalytic metal according to output value (NO2) of the NOx sensor after termination of O2 release, wherein a speed of lowering oxygen concentration during the diagnosis is set so as to be slower than that during non-diagnosis.